

37



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,703	10/23/2001	Terence Sean Sullivan		2954

7590 07/05/2005

Terence Sean Sullivan  
PO Box 425475  
Cambridge, MA 02142

EXAMINER
----------

NGUYEN, PHUOC H

ART UNIT	PAPER NUMBER
----------	--------------

2143

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/001,703

Applicant(s)

SULLIVAN ET AL.

Examiner

Phuoc H. Nguyen

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,13,14,17 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,13,14,17 and 21-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is in response to the amendment filed on March 28, 2005. Previous office action contained claims 1-7, 9, 13-14, 17, and 21-29. Applicant amended claims 1-3, 6, 7, 13, and 17; cancelled claims 10-12, 15-16, 18-20; and added claims 21-29. Amendment filed on March 28, 2005 have been entered and made of record. Therefore, pending claims 1-7, 9, 13-14, 17, and 21-29 is presented for further consideration and examination.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-7, 9, 13-14, 17, and 21-29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

2. The drawings are objected to because there is no label for boxes in Figures. The applicant is advised to clearly label all the boxes in Figures for clarifying the invention. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be

Art Unit: 2143

renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7, 9, 13-14, 17, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong U.S. 5,974,465.

5. Regarding claim 1, Wong discloses in Figures 1-3 a method for the optimization of a messaging system (e.g. abstract and Figure 2) comprising a sending node and at least one receiving node (e.g. Figure 1 and col. 2 lines 22-30), within a data network with a limited resource (e.g. col. 1 lines 13-36), comprising the steps of: a) assigning messages awaiting delivery to a receiving node a prioritization value at sending node (e.g. col. 2 lines 29-34 and col. 3 line 68 – col. 4 line 5); b) identifying selected messages awaiting delivery with a highest prioritization value at sending node (e.g. col. 2 lines 40-48 and col. 3 line 68 – col. 4 line 5); c)

Art Unit: 2143

transmitting selected messages to receiving node (e.g. 308 Figure 3), and d) repeating steps (b) and (c) until limited resource within data network is exhausted (e.g. Figure 3 and col. 2 lines 40-48).

6. Regarding claim 2, Wong further discloses in Figures 1-3 the communications link between sending, node and receiving node is intermittent (e.g. Figure 1 wherein the data pass through all the routers, switches...in between), further comprising the step of storing selected messages at receiving node prior to a user request to download selected messages system (e.g. Figure 3 308); via receiving node to a separate portable messaging unit, thereby proactively buffering selected messages at receiving node (e.g. Figure 2).

7. Regarding claim 3, Wong further discloses in Figures 1-3 the step of decomposing messages into message elements at sending node, and then processing each message element as an independent message with a separate prioritization value (e.g. col. 4 lines 6-13).

8. Regarding claim 4, Wong further discloses in Figures 1-3 decomposition divides messages into message elements comprising a) a header comprising at least a sender messaging address identifier and a message subject; b) a first message section, comprising no more than a predetermined amount of data, and c) a second message section (e.g. col. 4 lines 6-13).

9. Regarding claim 5, Wong further discloses in Figures 1-3 prioritization value depends upon the type of message element (e.g. col. 4 lines 20-24).

10. Regarding claim 6, Wong further discloses in Figures 1-3 the full text of message is proactively buffered at a set of messaging nodes that is a smaller subset of the messaging nodes where the header of message is proactively buffered (e.g. Figure 3 and col. 2 lines 23-49).

11. Regarding claim 7, Wong further discloses in Figures 1-3 limited resource comprises communications time during a single communications session between sending node and receiving node (e.g. Figure 2 from 209 to 105).
12. Re claim 9, Wong further discloses in Figures 1-3 limited resource comprises storage capacity on receiving node (e.g. col. 2 lines 40-49 reasoning for dropping un-prioritized packets).
13. Regarding claim 13, Wong further discloses in Figures 1-3 prioritization value depends upon an association table value for relating receiving node and a message recipient wherein receiving node is positively associated with a plurality of message recipients, and transmitted messages are subsequently available for download from receiving node to a portable messaging unit (e.g. abstract lines 5-8 and col. 4 lines 14-40).
14. Regarding claim 14, Wong further discloses in Figures 1-3 prioritization value depends upon the payment of a surcharge for the express delivery of message (e.g. abstract lines 5-8).
15. Regarding claim 17, Wong further discloses in Figures 1-3 prioritization value depends upon the predicted probability based upon prior behavior that recipient will request the download of any incoming messages via receiving node to a portable messaging unit (e.g. abstract lines 5-8 and col. 4 lines 14-40).
16. Regarding claim 21, Wong further discloses in Figures 1-3 transmitted messages are subsequently available for download from receiving node (e.g. 105 and Figure 2) to a portable messaging unit (e.g. 101-103).
17. Regarding claim 22, Wong further discloses in Figures 1-3 transmitted messages are subsequently available to the message recipient on a publicly accessible computer at receiving node (e.g. 102-103 through router 105 publicly).

18. Regarding claim 23, Wong further discloses in Figures 1-3 the step of transmitting at least one unsent message awaiting delivery at the time of resource exhaustion during a subsequent communications session between sending node and receiving node (e.g. col. 2 lines 23-49 and Figure 3).

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 24-29 are rejected under 35 U.S.C. 103(a) as being obvious over Wong (U.S. 5,974,465) in view of Lu et al. (U.S. Patent Application Publication 2002/0194342).

21. Regarding claim 24, Wong further discloses in Figures 1-3 the steps of proactively buffering selected messages at receiving node (e.g. 209 in Figure 2). Wong does not disclose in Figures 1-3 a step of temporarily disconnecting the communications link between sending node and receiving node, and while this communications link is disconnected, establishing a communications link between receiving node and a portable messaging unit and transmitting proactively buffered messages from receiving node to portable messaging unit. However, Lu et al. disclose in Figure 17 a step of temporarily disconnecting the communications link between sending node and receiving node, and while this communications link is disconnected, establishing a communications link between receiving node and a portable messaging unit and transmitting proactively buffered messages from receiving node to portable messaging unit (e.g.

[0169-0170]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention is made to add a step of temporarily disconnecting the communications link between sending node and receiving node, and while this communications link is disconnected, establishing a communications link between receiving node and a portable messaging unit and transmitting proactively buffered messages from receiving node to portable messaging unit as seen in Lu et al.'s Figure 17 into Wong's invention because it would enable to maximize the resource.

22. Regarding claim 25, Wong further discloses in Figures 1-3 messages for a plurality of users are proactively buffered at receiving node, and the step of transmitting proactively buffered messages to portable messaging unit comprises only transmitting messages for a single first user (e.g. Figures 2-3).

23. Regarding claim 26, Wong does not disclose in Figures 1-3 the steps of disconnecting the communications link between receiving node and portable messaging unit, and while the communications link between sending node and receiving node remains disconnected, establishing a communications link between receiving node and a second portable messaging unit and transmitting proactively buffered messages for a second user to second portable messaging unit. However, Lu et al. disclose in Figure 17 the steps of disconnecting the communications link between receiving node and portable messaging unit, and while the communications link between sending node and receiving node remains disconnected, establishing a communications link between receiving node and a second portable messaging unit and transmitting proactively buffered messages for a second user to second portable messaging unit. Therefore, it would have been obvious to a person having ordinary skill in the



Art Unit: 2143

art at the time the invention is made to add the steps of disconnecting the communications link between receiving node and portable messaging unit, and while the communications link between sending node and receiving node remains disconnected, establishing a communications link between receiving node and a second portable messaging unit and transmitting proactively buffered messages for a second user to second portable messaging unit as seen in Lu et al.'s Figure 17 into Wong's invention because it would enable to maximize the resource.

24. Regarding claim 27, Wong discloses in Figures 1-3 a method for the optimization of a messaging system comprising a sending node and at least one messaging node, comprising the steps of: a) assigning messages awaiting transmission to a messaging node a prioritization value at sending node (e.g. col. 4 lines 1-5); b) establishing a communications link between sending node and messaging node (e.g. Figure 1); c) transmitting messages awaiting transmission from sending node to messaging node, in order of prioritization value of messages (e.g. Figure 2), and d) proactively buffering transmitted messages at messaging node for delivery to a plurality of respective message recipients (e.g. Figure 3) while first communications link remains broken. Wong does not disclose first communications link is broken before all messages awaiting delivery have been transmitted. However, Lu et al. disclose in Figure 17 first communications link is broken before all messages awaiting delivery have been transmitted. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention is made to add first communications link is broken before all messages awaiting delivery have been transmitted as seen in Lu et al.'s Figure 17 into Wong's invention because it would enable to maximize the resource.

Art Unit: 2143

25. Regarding claim 28, it has same limitations cited in claim 26. Thus, claim 28 is also rejected under the same rationale as cited in the rejection of rejected claim 26.

26. Regarding claim 29, Wong further discloses in Figures 1-3 messaging system further comprises a plurality of messaging nodes, and further comprising the steps of transmitting information from messaging node to sending node identifying a delivered message transmitted to a portable messaging unit via messaging node; and transmitting from sending node to at least one other messaging node a command to delete delivered message from its proactive buffer (e.g. Figure 3).

### ***Conclusion***

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hakenberg et al. U.S. Patent 6,792,470

Harkins et al. U.S. Patent 5,689,642

Vange et al. U.S. Pub. 2002/0056006

Haneda et al. U.S. Patent 6,189,027

Hakenberg et al. U.S. Pub. 2002/0004838


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 571-272-3919. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H Nguyen  
Examiner  
Art Unit 2143

June 23, 2005



**DAVID WILEY**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**